Faculty of Nuclear Sciences and Physical Engineering CTU Prague

Education and training (& PR)

Jan Mlynář, Vojtěch Svoboda, et al. for IBA 2016

September 22, 2016

Outline

1 Curriculum "Physics and Technology of Thermonuclear Fusion"

2 Tokamak GOLEM

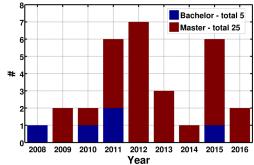
3 Promo

News

- !! Doctoral study program !!
- November 2015: FUSENET PhD event.
- Application for Joint degree program submitted.
- Application for PlasmaLab@CTU program submitted.

FTTF - 10 years

Students' final degree in Physics and Thermonuclear Fusion Technology



PhD event 2015



Success

- 130 students.
- Welcome team-building game and party.
- Plenary talks and discussions.
- Plenary oral presentations.
- Poster sessions.
- Excursions.
- Boat cruise and Dinner, with Tokamak Music Experience.

Submitted Project

Operational Programme Research, Development and Education

International doctoral programme in high-temperature plasma and nuclear fusion.

Joint doctoral degree with the Gent University.

Crossing fingers

Submitted Project

Operational Programme Research, Development and Education

High Temperature Plasma and Fusion Technology Laboratory

\approx 1 M€

- Paschen curve measurement.
- Microwave discharge.
- High temperature diagnostics tools.
- Data acquisition systems.
- Various laboratory tools.
- Tokamak GOLEM support.
- Sonoluminiscence
-

Crossing fingers

Thomas Noel Todd lecture for FTTF students



Lecture

How to build a tokamak.

To be continued ..

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Forecast 2015/2016

- The Night of Scientists II.
- Traditional TRAIning Courses: FUMTRAIC IV ✓, SCIWTRAIC VI ✓, HUNTRAIC V ✓ (last week), SUMTRAIC@GOLEM VIII X(()SOFT), EMTRAIC@GOLEM III ✓.
- Bachelor thesis ✓: Tatiana Okonechnikova 3D model defended.
- Diploma thesis IV cont ✓: Bořek Leitl Bolometry.
- papers in FUSENGDES,. ✓, AJP X(.). ?
- IAEA TM (Prague) presentation ✓.
- PhD event GOLEM presentation
 ✓.
- +Training courses from Kiten, Grenoble, Belgrade, Kobenhaven

Current status

- Vacuum problem (a hole in the vessel?). Historical copper shell prevents easy repair. REPAIRED!
- 3rd version of the tokamak GOLEM 3D model (Tatiana Okonechnikova).
- => Big plans :-) But lack of time :-(

Forecast 2016/2017

- The Night of Scientists III (next Friday).
- Traditional TRAIning Courses: FUMTRAIC V, SCIWTRAIC VII, HUNTRAIC VI, SUMTRAIC@GOLEM VIII, EMTRAIC@GOLEM IV.
- Bachelor thesis ?
- Diploma thesis IV cont.
- papers in FUSENGDES, AJP .. ?
- Training course from Belgrade II (next Thursday).
- Training course for Turin University in consideration.

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GOLEM discharges for broad public



- Live.
- As simple as possible.
- 3 parameters B_t , E_t , p_H .
- Cooperation with the ITER PR.
- ?? Every first Wednesday in the month
- ?? 24 hours of operation
- Web based application.
 First sketch ready.

Welcome ..

suggestion, comments, cooperation ...

ITER DG, Mr. Bernard Bigot at the GOLEM (Shot #22185)



Quotation from Czech Television Hydepark

I am very pleased with the GOLEM ...

GOLEM promo for Albert II, Prince of Monaco Shot #22407 a few hours ago ..



Acknowledgement

Acknowledgement

The financial support by FUSENET, MSM 6840770039, MSM 6840770014 and A1581, SGS SGS11/131/OHK4/2T/14 is acknowledged.

Special thanks to the GOLEM team (students, teachers, technicians)

Edita Bromova, Zdenek Cespiro, Ivan Duran, Vladimir Fuchs, Ondrej Grover, Igor Jex, Jindrich Kocman, Tomas Markovic Michal Odstrcil, Tomas Odstrcil, Gergo Pokol, Gabriel Vondrasek, Frantisek Zacek.